

**Engineering Evaluation Report**  
**T. Holleman&Co. Cabinet Makers & Designers**  
**Plant #17259; Application #13218**

**I. Background:**

The company T. Holleman & Co Cabinet Makers & Designers is involved in making cabinetry. The company has been operating a small painting operation since 1999. The owner/operator has applied for a permit to operate for the following spray booth where all the coating operations are performed.

**S-1: Paint Spray Booth, Viking Model TDB-108**

The company uses high volume low pressure (HVLP) spray guns. The company uses low VOC vinyl sanding sealer and acrylic lacquer. The total usage of coatings plus sanding sealer and the lacquer is 80 gallons a year. The applicant will be granted 120 gallons per year usage to accommodate potential growth of the company. Further the company uses about 5 gallons per year of acetone as clean-up solvent. The company will be allowed to use 10 gallons per year of clean-up solvent.

**II. Emission Calculations:**

VOC emissions = 120 Gallons/ yr. X 4.6 lbs/gal of VOC =552 lbs/year or 0.28 Tons/yr. Or 1.51 lbs/day

NPOC emissions=10 Gallons/year X 6.6 lbs/gallon(Acetone) = 66 lbs/year or 0.033 tons/yr  
or 0.18 lbs/day

NPOC emissions from coatings = 5.18 lbs/yr or 0.0026 Tons/yr or 0.014 lb/day

Total NPOC emissions for the plant = 0.036 Ton/yr or 0.194 lb/day

The emissions of precursor organic compound (POC) and Non-precursor organic compounds (NPOC) are summarized below. The POC and NPOC are defined under Regulations 1-234 and 1-235.

<u>Source #</u>	<u>Pollutant</u>	<u>lbs/day(annual avg.)</u>	<u>Tons/year</u>	<u>Cumulative Increase (Tons/year)</u>
1	POC	1.5	0.280	0.280
1	NPOC	0.19	0.036	0.036

**III. Toxic Screening Analysis:**

A Health Risk Screening Analysis is not required because none of the potential toxic air contaminants exceeds its respective toxic trigger level as listed in Table 2-5-1 of Regulation 2, Rule 5. The potential toxic air contaminant emission rate and respective trigger levels are:

<u>Compound</u>	<u>Potential to Emit (lb/yr)</u>	<u>Toxic Trigger Level Limit</u>	
		<u>Chronic (lbs/yr)</u>	<u>Acute(lbs/hr)</u>
Methyl Ethyl Keytone	1.05	39000	29

Since the annual usages of coatings and solvents will be limited by permit conditions and therefore the potential toxic air contaminant (TAC) emissions will be below their respective TAC trigger levels, the project is not expected to cause or contribute significantly to adverse health effects.

#### IV. Statement of Compliance:

BACT is not triggered because the highest day emission rate of each regulated pollutant is less than 10 lbs/day. (POC < 10 lb/day)

Regulation	Description & Compliance
8-32-301	Spray application equipment limitation
8-32-303	Furniture, custom cabinetry and custom architectural mill work limits
8-32-320	Solvent evaporative loss minimization
CEQA	This project is considered to be ministerial under Regulation 2-1-311 and therefore is not subject to CEQA review.
PSD, NSPS, NESHAPS	None of these are triggered
Offsets	Not triggered
Toxic risk screening	Not triggered per Regulation 2-5-110
Waters Bill Public Notification	Triggered in accordance with Regulation 2-1-412

#### V. Conditions :

The conditions apply to the following sources:

##### S-1 : Paint Spray Booth, Viking Model TDB-108

1. Total Usage of coatings at S-1 shall not exceed 120 gallons per year. (basis: Cumulative Increase)
2. Usage of cleanup and coating thinner solvents such as lacquer thinner, mineral spirits, alcohol, acetone and naphtha shall not exceed 10 gallons per year. (basis : Cumulative Increase)
3. The VOC content in coatings used for furniture, custom cabinetry and custom architectural millwork shall not exceed the following limits:

<u>Coating</u>	<u>VOC Limit</u> <u>(Lb of VOC/ Gallon of coating)</u>
Clear Topcoat	4.6
Sanding sealer	4.6
Pigmented coating	4.6
High solids stain	5.8
Filler	4.2
Low solids stain	4.0
Low solids Wash-coat	4.0

(basis : Regulation 8-32-303)

4. To demonstrate compliance with Conditions 1 through 3, the owner/operator shall keep records on a weekly basis of all the coatings, coating thinner solvents and cleaning solvents used at S-1 and their respective VOC contents in a District approved log book. These records shall be retained for a period of at least two years following the date of entry and made available to District staff upon request. (basis : Regulation 2-1-403)

#### VI. Recommendation :

Wave the Authority to Construct and issue a conditional Permit to Operate to T. Holleman & Co. Cabinet Makers & Designers Plant #17259, for the following source:

##### S-1 : Paint Spray Booth, Viking Model TDB-108